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GALANDRINIA GRANDIFLORA



OCTOBER, 1885.

FITFUL weather we must call that of the last spring and summer; and September, to the present time, the twelfth of the month, has been very cool and moist. It seems as if father Sun and mother Earth had conspired to dole out grudgingly and with a snatching hand their favors to the farmer and gardener. The small grains, though fairly abundant, have suffered much loss in many localities by rains, even after harvesting. We much hope for favorable weather for the crops yet to be gathered.

During the past four months the changes in the weather have been frequent and extreme. Western New York, on account of the influence of the lakes, has probably felt these changes less than many other parts of the country, and yet, the fickle character of the weather has made our farmers and gardeners unquiet and apprehensive, and some crops have actually been shortened.

The Virginia Creeper took on its purple tints even in August, although there was no lack of moisture; the Oaks and the Maples are now lighting up the landscape with color, and these features, thus early in the season, are, no doubt, due to the many changes from high to low temperature that now characterize the weather. The short summers at the North, and the unsteadiness of the weather are elements in the cultivator's

calculations that always give him more or less anxiety, and it is for this reason that we are always seeking quick-growing and early ripening varieties for the field, garden and orchard. The earliest maturing plants, as a rule, are less productive than those that are forming their products through a longer period, consequently the limit of profit may be passed with some crops by varieties of plants that mature too quickly. Hence the need of different varieties of grain-bearing plants, vegetables, fruits, and flowering plants, and new varieties will always continue of great interest. But unreliable weather makes it important that we attend with greater care to the preparation and tillage of the soil, to ample manuring, early planting, and to the protection and marketing of gathered crops.

It is necessary that we now look forward to the operations of the coming spring-time. Look after the drainage of the land and see that it is perfect. All heavy soils are better for plowing or digging in the fall, and leaving rough through the winter. Carefully collect and care for sufficient manure for all the most valuable crops. Decide now upon the plots to be devoted to the main crops of vegetables. Look after the early spring flowers by planting bulbs, herbaceous plants, and, if possible, flowering shrubs, this fall.

THE FRINGED HIBISCUS.

About six years since a peculiar variety of *Hibiscus* was brought out in England, having been received there from tropical Africa. This was *Hibiscus schizopetalus*, its specific or variety name, referring to the deeply cut petals. As it has now been in cultivation a few years we can

rect. "It resembles *H. rosa-sinensis* in its mode of growth, but the flowers are three inches in diameter, borne on long, slender, drooping stalks about four inches long, produced from the axils of the leaves on the upper portion of the branches. The color of the petals varies from a rich, deep crimson to a pale pink tinge, and they are deeply and elegantly fringed and reflexed, much in the same way as a Turk's Cap Lily. The golden-tipped stamens, with the protruding, velvety styles, are arranged in a bottle-brush manner on the upper half of a slender tube from one inch to two inches long, thus giving the flower a singular appearance."

A well grown specimen of this plant in bloom is certainly very distinct and beautiful in appearance. It will not fail to attract attention in any collection of plants.

The plant requires warmth, and will not be satisfactory when cultivated with ordinary house or greenhouse plants. It is easily propagated by cuttings of the half-ripened wood. Plants started the latter part of winter will sometimes bloom the following summer, though not much is to be expected from them until the next year. A good turfy loam with a little sand is best suited to them. When the blooming season is over, or in the latter part of summer, shorten the shoots a little, and when the buds again start repot the plants into larger pots in similar soil. During autumn they should have both the soil and the air rather dry, and during winter



HIBISCUS SCHIZOPETALUS.

speak confidently in saying that it is worthy of attention among warm house plants. In regard to this plant botanists differ, some considering it to be merely a variety of *H. rosa-sinensis*, while others accord it specific rank. The following description, written when the plant first bloomed in England, is brief, and cor-

can be kept in a temperature of 60° to 65°. On the approach of mild weather a higher temperature and more water is required. Frequent use of manure water during the growing season is an advantage. If water is lacking either in the soil or air during the growing season the foliage is liable to attacks of red spider ;

frequent use of the syringe should be made. Tobacco water or fumigation will be a defence against green-fly. Close watch should be kept for mealy bug,

which must not be allowed to get a footing. With these precautions it will be found that the plant can be raised with no more trouble than *H. rosa-sinensis*.

COCA.

The public has recently become so well acquainted with the use of Coca as a drug, especially in one eminent case, that some correct information in regard to this product may prove acceptable.

The drug is prepared from the Coca leaf, or the leaf of the plant *Erythroxylon* Coca. The essential principle of the

in height on the Andes of Peru, at a height of two thousand to nine thousand feet above the sea level. The use of the leaf as a stimulant has long been known in that country, and is quite prevalent, requiring a large annual supply, to meet which the plant is largely cultivated in Peru, Ecuador and Bolivia.

The plants are raised from seed sown as soon as the end of summer, or soon after they are ripe, in beds or in boxes of soil. At the commencement of the following summer, when the plants are six to eight inches high, they are transplanted into the grounds they are to occupy, usually on terraces on the mountain side. They are set about three feet apart, and the frequent removal of the leaves has the tendency to check the growth of the plants so that they may grow only from two to six feet high, according to the character of the soil. The first picking of leaves is usually made when the plantation is about eighteen months old. The bushes yield three crops of leaves a year, seldom more, the commencement of each season being respectively in January, May and October. The Coca leaf, while still on the shrub, is of a bright green, of a thin texture, but opaque, oval in shape, and strongly marked with veins, of which two, in addition to the mid-rib, run parallel to the margin. The blossoms are



ERYTHROXYLON COCA—LEAVES AND FLOWERS.
AFTER LE MAONT AND DECAISNE.

plant being Cocaine, as that of Coffee is known as Caffeine, and of Tea or Thea as Theine. From the resemblance of the names some may have supposed that the drug was prepared from the same plant as the article Cocoa, which we use as a drink, but this is not the case, Cocoa being a product of *Theobroma Cacao*, a plant very different from the other.

The Coca plant, *Erythroxylon*, is a shrub which grows from six to eight feet

white, and these are followed by small, scarlet berries.

The leaves are gathered when there is no dew or moisture on them, by women and children, with great care; in some districts this care is so great as to cause them to take off each leaf by cutting through the stem with the thumb or finger nail. After gathering, the leaves are carried to enclosed yards, where they are spread out to dry. These yards are

specially prepared by paving with stones, and are so situated as to get the full force of the sun's rays, which heat the pavements quite hot. In favorable weather the leaves spread on the pavements will cure in three or four hours. Dampness after curing affects both the color and quality of the leaves, and it is carefully guarded against. The leaves are of a perishable nature and cannot be kept in stock a great length of time.

The Coca leaf, when chewed, is a powerful stimulant to the nervous system, of the nature of opium, but less violent and more lasting in its action. BERNAYS says: "There is so much concurrent testimony as to place beyond doubt the fact that the moderate use of Coca leaves as a masticatory enables fatigue to be endured with less distress and with less nourishment. MARKHAM says, that he chewed Coca very frequently, and, besides the agreeable soothing feeling produced, he found that he could endure long abstinence from food with less inconvenience than he would otherwise have felt; and it enabled him to ascend precipitous mountain sides with a feeling of lightness and elasticity, and without

losing breath. To the Peruvian Indian Coca is a solace which affords enjoyment, and has a most beneficial effect." Quoting from the same authority: "The incredible fatigue, says VON TSCHUDI, endured by the Peruvian Infantry, with very spare diet, but with the regular use of Coca, and the laborious toils of the Indian miner kept up under similar circumstances throughout a long series of years, certainly afford sufficient ground for attributing to the Coca leaves not a quality of mere temporary stimulus, but a powerful nutritive principle,"

But the excessive use of Coca is well known to be injurious, and the unsteady gait, the yellow-colored skin, the dim, sunken eyes, the quivering lips, and general apathy are the indications of the inveterate Coca chewer. It is, however, considered the least injurious of all narcotics in use, and in the higher regions of the Andes its effects are less marked than in warmer and damper districts.

As a palliative agent in the hands of a skillful physician, Cocaine is capable of greatly alleviating human suffering, and its use in this manner will henceforth be widely extended.

CALANDRINIA GRANDIFLORA.

The beauty of this plant when in bloom is well illustrated by the colored plate presented this month.

The genus *Calandrinia* belongs to the *Portulaca* family, and most of the species are natives of the Pacific coast of this hemisphere, some of them in South America and some in California. *C. Menziesii* is one of the most abundant of early flowers in the open ground in California. Our present subject, *C. grandiflora* is a native of Chili, where several other species are also found. The name of the genus was bestowed as a compliment to the Italian botanist, J. L. CALANDRINI.

The plant, which is very neat in appearance, has its leaves arranged in a rosette form at the surface of the ground; these are smooth and fleshy, and of a lively green color, and about six inches in length. The flower-stem is thrown up

a foot or eighteen inches in height, and continues in bloom for a long time through the last half of summer and in the fall. Like the *Portulaca*, the flowers close in the absence of the sun. The plant loves the sun, enduring perfectly in heat and drought; it is very suitable for rock-work, and for bare, exposed places. As it is an annual, the plants must be raised every year from seed started either under glass or in the open ground; it is much better to raise the plants where they are to remain, as they do not take kindly to transplanting—it takes a long time for them to overcome the check of removal, and are never so good for it afterwards. Give them a dry spot, fully exposed to the sun, and the plants will grow vigorously and produce an abundance of their showy, satiny-rosy flowers for a long time.



CORRESPONDENCE.

THE LEGEND OF THE THORNLESS ROSE.

One day a lover brought a Rose
To her he loved. "Behold," said he,
"The fairest flower of all that blows—
Like this the love I give to thee."

She took it, smiling up at him;
A sharp thorn pierced her tender hand
With cruel pain; her eyes were dim
With tears he could not understand.

"My love is not like yours," she said,
And kissed the flower that wounded her,

Its milk-white petals stained with red,
Yet sweet with scents of musk and myrrh.

Years came and went. Her tender heart
Was often wounded till it bled,
But with a smile she hid its smart;
"Though cruel, love is sweet," she said.

She died, and from her grave there grew
A Rose, on which there was no thorn;
From heart so tender and so true
The thornless Rose of earth was born.

—EBEN E. REXFORD.

VILLAGE IMPROVEMENTS.

This question is one of great importance, and of increasing interest, as there is, at the present time, so much attention given to the improvement of villages and homesteads with their surroundings. The number of persons, happily increasing from year to year, who have a desire and a determination to make their homes pleasant and attractive, thus setting a good example to others, so far as their influence goes, are entitled to commendation and assistance, and often derive help from suggestions so often found in periodicals like your own. But in order to accomplish much in this way in a rural community, it would seem necessary to have a club or the concerted action of a few individuals, at least, who have a real desire to improve their town or village, making it attractive as a place of residence.

As an illustration of what may be accomplished by such an organization composed of a few intelligent and public spirited persons, whose efforts and their results have come under my own observation, are here submitted, hoping their success may stimulate others to do likewise.

At the time when the "Rural Art Club" was formed, some years ago, there was nothing about the village in the way of ornamentation very noticeable; one or two individuals, as in most villages at the time, had their front yards and perhaps small gardens, with the meagre supply of shrubs and flowers to be obtained at that period. The green, or commons, around which a greater part of the vil-

lage was built, was correctly called the "commons," as it was free to travel in all directions, and cattle and pigs were by no means excluded from its use.

This common has been made into a beautiful park with a fine variety of trees and shrubs, with its walks and fountain, adding wonderfully to the appearance of the village and to the pleasure of the inhabitants, who feel a laudable pride in their park. The various streets leading to the village, and the new streets opened as the growth of the place required, have not been neglected, but embellished with suitable shade trees, and many of the beautiful homes on these streets bear witness to the taste and enterprise of the residents.

At the stated meetings of the "Rural Art Club," one or more essays by some of its members were read and discussed, and any topic of general interest was published occasionally in the village paper, that those not members of the club might derive benefit from the suggestions presented.

As the old cemetery became crowded, and was itself a barren, unattractive spot, a rough, hilly tract of land of several acres, near the village, was secured, and an association formed, who laid it out and improved it for a new cemetery, making it a very pleasant and desirable place for its purpose, and one in which all feel a pride and interest.

As one improvement naturally leads to another, so, recently a system of water works has been furnished the inhabit-

ants, adding to the health and convenience of all concerned.

Allowing that much may be done by individual effort towards beautifying and improving towns or neighborhoods, yet the combined labors of a few active and intelligent persons, who have the good of the public at heart, seems desirable and necessary in order to make rapid and permanent improvements in any village, both in the way of sanitation and making homes beautiful. Even a few persons who are willing to give a portion of their time and are generous enough to distribute to others such trees, shrubs and plants as they could easily spare, would contribute in no slight degree to the happiness of others, and be amply rewarded in the improved appearance of their neighborhood.

Of course, various methods will suggest themselves to such an association in order to awaken an interest in the public generally in all subjects pertaining to sanitation or rural art, such as occasional lectures by physicians of the place upon the general principles of drainage, loca-

tion of wells and subjects relating to the health of families, with essays upon improving and decorating homes, illustrating and impressing upon all what may be accomplished by the judicious use of trees, shrubs and plants in rendering their homes pleasing and attractive. A few years of such persevering and systematic effort will result in wonderful improvement of neighborhoods, and prove a great means of education to the young.

Our laws, at present, in regard to cattle running at large, are such that the old, unsightly fence around every door-yard, is rendered unnecessary, and it is gratifying to see that they are gradually being removed, adding greatly to the beauty of a street. Every school district should take interest enough in the welfare of the children to plant trees about the school-house, making it more comfortable and pleasant in every way.

Thus, briefly are presented the methods which, to me, appear to be the most effective and expeditious in accomplishing many and important village improvement.—F. H. H., *Irondequoit, N. Y.*

A SMALL OUT-DOOR FERNERY.

There are but very few small gardens in the cities or in the rural districts where an opportunity does not exist for the making of a pretty hardy fernery. The north end of the dwelling house or barn may be turned to good account. If the surroundings prevent the use of such locations, a space behind the bushes, between them and the boundary fence will be found useful. Send a tiny, winding walk by one of the larger bushes into one of these neglected spots, and let the walk emerge at another convenient point. In selecting the position protection must be afforded from cold, blustering wind, and shade sufficient to break the direct burning rays of the sun. The free growing and larger species of Ferns will grow in any fresh turfy soil, with an admixture of sandstone grit and small stones. All silly or elaborate attempts at rockery making are unnecessary; all that is required is a rich sandy loam well mixed with the materials mentioned above. When they commence to grow after planting, daily sprinklings with tepid water are beneficial, adding, as they do, considerably to the freshness, health and

beauty of the young fronds. The following are a few of the best and hardiest species for out-door culture:

The Bird's-foot Fern, *Adiantum pedatum*, is one of the most beautiful of Maidenhair Ferns; it grows luxuriantly in a shady spot protected from direct sunshine. If a few pieces of sandstone of good size are placed round its roots, they will retain the moisture and keep the roots in a cool condition.

The common Polypody, *Polypodium vulgare*, is a hardy, free-growing plant. Its fronds are about one foot long, of a deep green color, the bright orange-colored clusters of spore cases adding to its ornamental appearance.

The Royal Fern, *Osmunda regalis*, is one of the most valuable if rightly treated; with abundance of moisture it will rear its noble form above all others.

The Hart's Tongue Fern, *Scolopendrium vulgare*, is one of the finest and most distinct of all our native Ferns. It grows freely, but when growing should receive a copious supply of moisture.

The Ostrich Fern, *Struthiopteris germanica*, is one of the most beautiful,

growing under good cultivation to the height of five feet. It is of easy growth.

The Silvery Spleenwort, *Asplenium thelypteroides*, is a fine large Fern, generally found on the shady banks of streams.

The Shield Fern, *Aspidium marginale*, a large, hardy, handsome plant, of easy culture; its native habitat is rocky woods. It will withstand drouth better than any of the preceding species.

Woodwardia Virginica. Among the many native species few are more ornamental than this; when well grown it is very handsome. Its fronds are of a pale green color, thrown up from an underground stem to a height of two feet; it delights in a cool spot with abundant moisture.

The above species are some of the best for out-door culture. The names of others just as handsome and delicate could be given, for our native Filices

abound in beautiful forms. The tyro in Fern culture will do well to remember that these plants require screens to shelter them from cold winds and the fierce rays of the sun. Daily sprinkling, especially in the evening, is always rewarded by success. Moisture should be frequently applied to the soil. Ferns suffer no harm, but on the contrary derive great benefit if the soil is occasionally irrigated during protracted drouths. They also delight in high living. Mulch the surface about the plants with well rotted manure. It is useless to try to starve Ferns into a dense and luxuriant growth.

We only know of two plant growers in the United States who make the culture of hardy native Ferns a specialty, cultivating upwards of sixty species. They offer plants for sale at a low rate, which brings them within the reach of all lovers of beautiful forms and delicate foliage.—J. W. R., *Kansas*.

TWENTY YEARS' EXPERIENCE WITH PLANTS.

Lovers of plants take pleasure in communicating their garden lore to others, and I have thought I would tell your readers something of my twenty years' experience away north in the Province of New Brunswick. The perusal of a copy of VICK'S CATALOGUE, which fell into my hands about a score of years ago, first set me at the cultivation of flowers, and since then I have raised, or tried to raise most of the plants mentioned in the catalogues, except those requiring stove or hot-house culture.

For several years I tried my "prentice hand" with seeds only, but I have now come to make a specialty of herbaceous and other perennials, with fair success, and have at present a large collection of these plants, numbering some one hundred and fifty or two hundred varieties. Besides the old plants found in most gardens, such as *Dicentra*, *Veronica*, *Hemerocallis*, *Monkshood*, *Tiger Lily*, *Columbine*, *Jacob's Ladder*, *Spiræa*, *Phlox*, the old *Pæony* and many others, I began to make a collection of the newer plants as they were offered. I have gradually got a collection of *Pæonies*, including nearly all the shades of color offered, and can recommend this plant to every lover of the beautiful, as it is entirely hardy, and during its period of

bloom is not surpassed in splendor and showiness by any plant I am acquainted with. The double white and the variety named *Pottsii* are among the best. I planted the most of the Lilies, except some of the most expensive ones. The *Auratum* I consider the finest of them all, but there are many others that no lover of flowers can afford to be without. The little *Siberian Lily* is a perfect gem, with the odor of *Mignonette*, and I have found the *lancifolium* class very satisfactory. The pure white *Candidum* is always a good Lily, and I have found none more certain to bloom and increase in size than a variety called *Umbellatum*. The *Longiflorums* and *Thunbergianums* are beautiful Lilies, but with me they showed a tendency to deteriorate, and in some cases to disappear altogether. Our native *Canadense Lily* improves with cultivation, but the *Superbum*, so much vaunted in some of the catalogues, has never done well with me. But of some thirty kinds that I have planted, I think the *Martagon*, the *Fortunei* and the *Superbum* the poorest of all.

The *Irises* are beautiful plants, of diversified colors and varieties. I have obtained quite a large collection of them and am disposed to place *Susiana* and *Kämpferi* at the head of the list. The

Perennial Phlox is a plant of which some of the more common varieties are often found in our gardens, but few people are aware of the beauty of some of the new varieties, such as Jules Ferry, Prince Christian, Premier Minister, Charles Turner, and many others. I have found these plants perfectly hardy, sure to bloom, and quite satisfactory in every way. The Crown Imperial is one of the noblest of plants, and one of which I am surprised that we do not see and hear more. It is beautiful and stately in appearance, as hardy as it can be, and one of the first to make its appearance in the spring. I have found the bulbs to reach a great size, as much as six inches in diameter. So far, I have but one variety, but I intend to obtain other kinds of this plant. Narcissus is a bulb generally of low price, entirely hardy, except the Polyanthus kinds, of many varieties, single and double, and one that I can recommend highly to the amateur gardener.

For showiness, few things can exceed the gorgeous *Papaver orientale*, which is easily grown from seed, and which every body might have; a hardy perennial, with flowers of immense size. For continuous bloom the Perennial Flax, *Linum perenne*, is almost unrivalled among perennial

plants. All through the season it continues to put forth its beautiful blue and yellow flowers. I must not omit to mention *Yucca filamentosa*, *Hyacinthus candidans*, *Platycodon*, *Dictamnus* and *Spiræa palmata*, as among the plants I have had good success with. These are all somewhat rare, very beautiful, and with me perfectly hardy and vigorous, as are also the Golden-spurred Columbine, *Delphinium formosum* and many more, though it is in cold New Brunswick.

I have planted nearly all the shrubs offered, and have found them all hardy here, except *Althea*, though the *Hydrangea grandiflora* comes very late into bloom, and is soon deprived of its beauty by the frost. My favorites among the shrubs are *Deutzia crenata* and *Spiræa prunifolia*, though perhaps in peculiarity of appearance none is exceeded by the *Rhus cotinus*, or Mist Bush.

Of the tender perennials, I find none here so satisfactory as the *Gladiolus*. It always grows and blooms, is wintered in the cellar as easily as a Potato, never rots or has any disease, increases quite rapidly, and has a large range of color. I have not had much success in wintering *Dahlia* tubers, which, with me, have a tendency to rot in the cellar.—W. S. B., *Grand Lake, New Brunswick.*

A COUNTRY VIGNETTE.

Those are true connoisseurs of existence who lead a country life within reach of a large city. The more primitive the region the better, as it is just rescued from its heathen wilderness and not quite pathless. Such a country one may find within ten miles of Boston, quiet as when the Puritans left it, with gray stone walls that have mouldered to a natural growth of the scenery, overhung by fence-rows in autumn, bright with the fire of the Wild Cherry and Swamp Maple, with footpaths crossing closely cropped fields which the speculator kindly allows to lie idle, sheltered here by a breast of dusky Pine wood, there by a screen of young forest, or wood lot enclosing some old large trees that seem dying of heartbreak at the change around them. There are brooks, choked in places by beds of Water Cress, flowing through Gentian meadows, which light a spike of Cardinal Flower till October,

and on whose borders the Michaelmas Daisies, our rosy-purple Asters, linger till All Souls Day. There are fields never plowed in the memory of man, and the aboriginal Cotton Grass powders old banks which the Indian trail first traced. Somewhere in the view a noble hill or two breaks in, crested and ringed with fires in dry spring nights, or massed in deep hazes, for Indian summer, never due before November. The sharp fine line of the railway through the valley is hardly a discord in the scene, but flings its coiling clouds of steam across the hillside, and rings its jubilant bells in daylight and darkness, only to let the country side sink into deeper quiet afterwards. The little hollow where the station stands, with hardly a house in sight, is alive in July nights with Will-o'-the-Wisp and marsh lights, and you come upon a witch's Sabbath of them going to meet the late train sultry evenings. The banks

are crimson with dwarf Blueberry bushes up to your garden gate, and the quail come up to the orchard with their tender calling, and walk curious among the flower borders of your quiet demesne. There are stories of a wild cat in the woods by the old lake, come down from Boxford way, and a snake hole was found in the greenhouse, yet you are only half an hour from the Athenæum library and Loring's. Your coffee and lobsters are hardly cold from town markets when they come out, and no town table can show finer mackerel than are broiled for your breakfast; you have town living and country rents, wood fires in the library and a furnace all over the house, new laid eggs from your own fowls for your breakfast, and the morning papers by early train; cut bouquets from your own Baroness Roses, and you go to theater with the certainty of being in your bed before your friends at the west end, who take the horse car, are in theirs.

People wonder what you can find to live for in the country, and you find the days are never long enough for your delightful pursuits. There are the new Strawberries to be divided, and the belt of English shrubbery planted with Laurestinus, Mezereon, double Cherry and Hollies, the new Crocus bed to be made and the Lily of the Valley bulbs to set in the woods next the house, where you are bent on making a wild garden. There are greenhouse and cold-pit salad beds and cuttings to be seen to, and you grudge MICHAEL his share of the delightful out-door work these glorious days. There is a beautiful, scarce marsh plant sent from Tom's River, in Jersey, and the black Wallflowers, from Aberdeen, that you have been trying to get these three years, and a cutting of the Mission Rose, from San Gabriel, to be potted in the greenhouse, and you take a bright day for a five mile excursion to take up Lobelia for the wood path, from where the banks were carmine with them last fall, down on the Providence road. There are books, the last novel, and a priceless old garden treatise unearthed from a city library, the London and Paris monthlies, and a charming scientific work just out. There is your piano, and a store of quaint old-new music, which you find yourself playing into the small hours. There is time for study, writing to some

purpose, for society and charitable work, entertainments planned for the neighborhood, old houses round to be photographed, and old reminiscences collected, drives to the lake, the old mines, the other side of everywhere, to Purgatory, Jerusalem Corner, Gehenna, and the queer names the village people like to tack on back road settlements. There are the town schools to visit, the Girl's Home, and the town house, having a friendly interest in your neighbor, in a scripture sense, beside going to Boston to hear a debate, or to see the new pictures. You don't know what to do with yourself in the country, but not because there is so little to be done.

You have barely time to mark the subdued changes of the serene autumn, which, forgetting it was not summer till October, gently steals through its work unobserved, to get all right in time for November. In 1883 the woods were like glass and fire, in vivid hues of blood, carbuncled, garnet lights, and gold bronzes. The blood was burning in each leaf, such a glow as comes once in ten years or so, the woods being well ripened by the long, dry fall. Last year you lifted your eyes to the hills and wood sides of mellow coloring, almost sunk in deep blue, smoky mist. The Hill loomed like a mountain leagues away across the interval in the haze. In the morning light from the glazed end of the breakfast room the warm reds and pale yellows looked lifeless, but by afternoon, when the sun struck through them, all the world was in a rich, sombre splendor, mantling with orange and Titian reds and blood purples, which deepened into the Etruscan hue the bare earth, a majestic harmony of color, lingering as befitted the bland year when sun storms, comets and baleful powers suspended their Saturnine sway.

Dull, living in the country! I think the country is the only place fit for an intelligent human being to live in, and have tried to give evidence of the countless comforts and delights that one may gather about an out-of-town home. It does not take a large income to have these things, nay, it is a very small one, shrewdly spent, which gives all these, by withholding the dimes and dollars needlessly spent for ill-considered show or social demands. If you have the

choosing of your own lot, bend every home, to be left for the heritage of your energy to the making of such a country children after you.—SUSAN POWER.

COTTAGE DESIGN.

This design is for a dwelling to cost \$1,600, without plumbing or heating, it having been contracted for at two different times for that amount during the month of July, of the present year. This design combines the useful and ornamental in a very economical manner. The exterior of the cottage is quite im-

ground; foundation is of stone, and the cellar is under the kitchen and dining-room.

The interior is a little novel in its arrangement, the usual entrance hall being dispensed with, and sitting hall and parlor occupy the front part of the dwelling. The main front entrance is through a vestibule with space at one end for hat



FRONT ELEVATION.

posing, and has the appearance of a much more expensive house. The details are very simple, being mostly in straight lines. There is nothing in the way of fancy cutting or scroll work to make it more difficult to build in the country than in the city. The frame is of the balloon style, sheathed on the outside, and paper lined throughout. All double casement windows are hung with weights. All large window glass are double thick, and are of first quality American. All roofs have tin gutters at eaves, with wood back and tin conductors to

and coat rack. The three principal rooms are all thrown together conveniently with sliding doors, and each has a grate or fire place. The two front rooms have angle corner windows, which form bays in the rooms, and make a pleasant feature. The stairs are centrally located and convenient from all principal rooms.

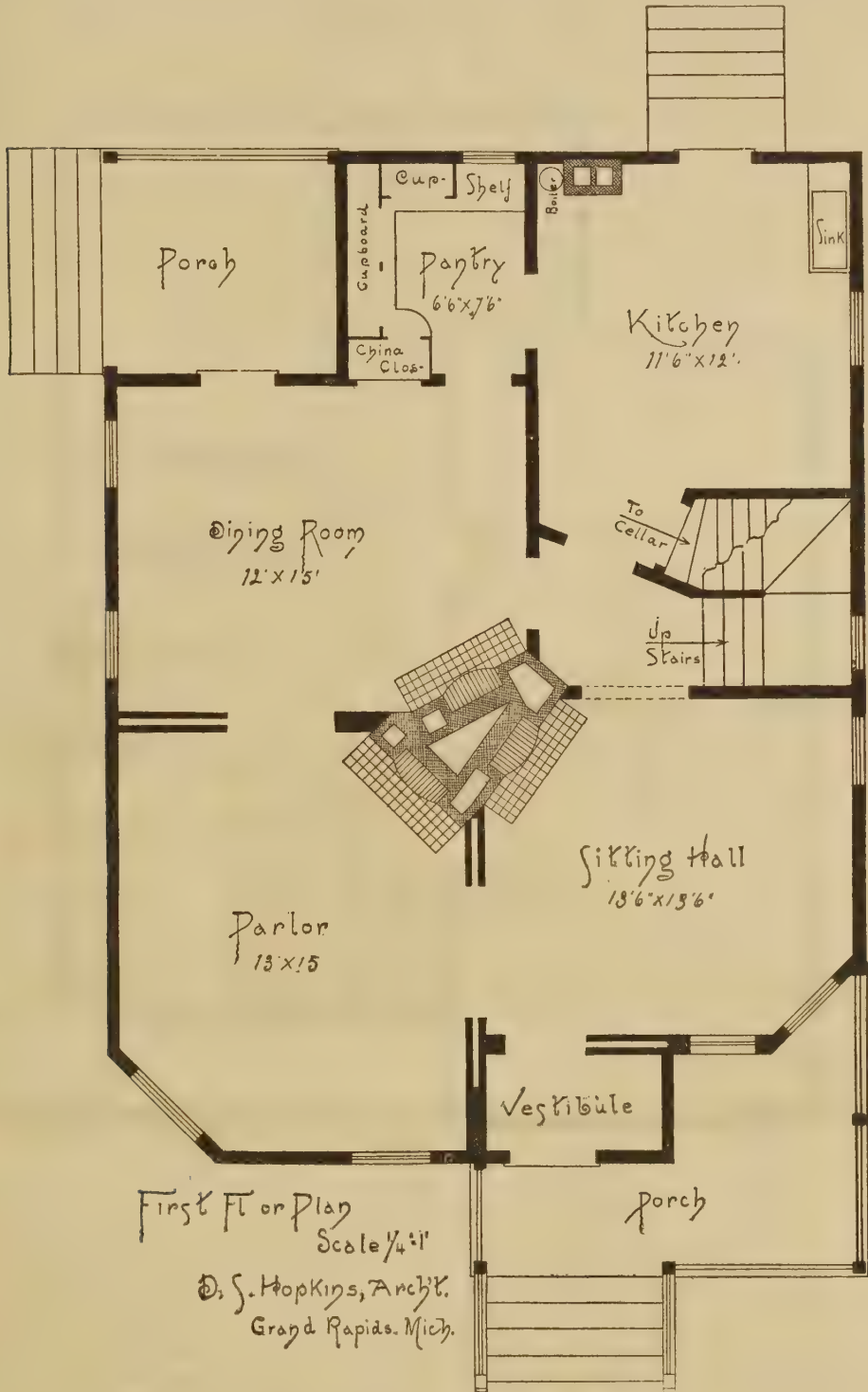
The second floor is very pleasantly arranged, and contains four chambers with a closet to each, and a bath room. There are stairs to the attic, and a room or two could be finished off in it, if desired, otherwise it is a fine place to dry

clothes in bad weather, or for general storage.

Any further information desired con-

cerning the design will be cheerfully given by sending stamp with letter.—D.

S. HOPKINS, *Grand Rapids, Mich.*



A FEW CHOICE FLOWERS.

Golden Queen Mignonette I prefer to all others. It is a novelty in color and of stronger growth than the old fashioned kind, and the heads of bloom are much larger. I can say with H. CANNELL, of

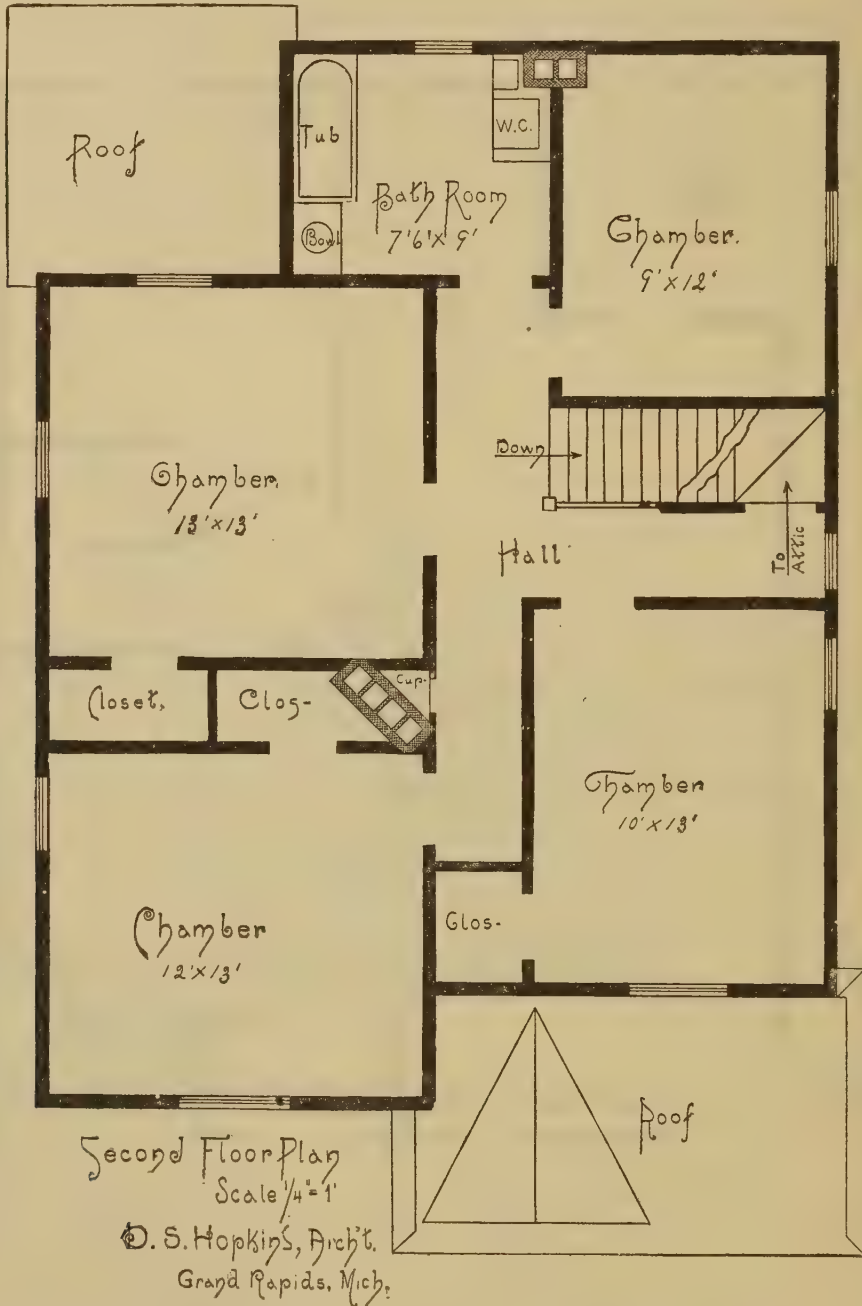
England, "It should be in every garden."

The new double Gaillardia Lorenziana, I had for the first time last season, and was especially pleased with it. It is very showy, with its orange and red heads of

bloom; and its free-blooming qualities, with long season of flowers, make it a very desirable annual.

The new *Helichrysum Fire Ball*, blossomed profusely, and is the most brilliant

The new *Dahlia Zimpani* is, indeed, a novelty, with its small, single black—well, almost black—flowers, which grow on stems fully eighteen inches high. It grows easily from seed, as, indeed, do all



and beautiful of the Everlastings. I cut many before fully expanded, and they prove admirable for winter decoration.

Zinnia Haageana fl.-pl. A new dwarf variety bearing a profusion of dainty flowers, bright and pale yellow in hue, something like the *Calendula Meteor*. By the way, everybody ought to have the *Meteor*, it is such a strong grower, such a great bloomer, and so attractive.

Dahlias. My first experience with seedlings, last year, was very satisfactory. I had some beauties from the *Paragon* varieties. The *Juarezi*, Cactus *Dahlia*, with its long, twisted petals of a dazzling scarlet, is a beauty, and a grand bedding *Dahlia*. This originated with H. CANNELL, and was first sent out in 1879. *Paragon* and *Glare of the Garden*, or *Fire King*, as it is sometimes called, have

come to us from the same florists, and proved very popular. Maximilian is a new, large-growing species from Mexico, introduced here last year, I think. Its flowers are semi-double, purplish-lilac in color.

Double Floret is a novelty. It is peculiar in the filling up of the florets, which, instead of being in the nature of tubes or cups, are occupied with quills, or replica florets. Ware's White Queen, a new single white, and Cannell's Alba, introduced here last year, are represented as very fine, but it is amusing to read the encomiums of the originator over a new variety until the next year or two after another is brought forward, and then the former is depreciated. For instance, the Alba was the acme until Avalanche was born, and then what does Mr. CANNELL say? Why, that "beautiful as Alba is, it is surpassed by this now offered. Habit very different, and much more perfect." All that we can understand, but now, "Alba is far too weeping, and only occasionally will it hold its flowers so that they may be clearly seen, in fact, the habit is what is generally known in the gardening world as 'floppy,' whereas Avalanche holds its flowers erect on a

stiff footstalk, very free, and the whole plant makes nearly double the effect—its flowers are of greater substance and bolder outline," etc. The illustrations show quite a difference in the two, but what a pity the faults of Alba were not sooner apparent! Are not florists cute in devising ways and means for disposing of novelties, which, of course, always command a greater sale and a higher price the first year. They drop down fifty per cent. the next, but another novelty takes its place, and that is always "the very best thing out." I suppose Avalanche will be sent out by some one in this country this coming spring; if we make its acquaintance we will report on its merits sometime.

I can praise the new double Abutilon; it is all that is represented. The first double one ever known, and it has made a good beginning. Hope we shall have a double white pretty soon.

Have any of you the *Lasiandra macrantha floribunda*? I greatly admire it. It has pretty plush-like leaves, and bears flowers of a rich violet-blue, between five and six inches across. Introduced from Rio Janeiro in 1836.—MARY D. WELLCOME, *Yarmouth, Maine.*

AN INTERESTING VEGETABLE GARDEN.

A vegetable garden may be made to look quite pretty and inviting by simply running paths through it, and in planting and sowing the seed along the same for a border or edging. Most vegetable gardens are a labyrinth, a maze, a tangle; there is no way of getting around or through them, one can go so far and no farther, can view the landscape o'er from a point or two, can see that there is a forest of Corn, a patch of Potatoes, a few sprigs of Lettuce, and generally plenty of weeds. There seems to be so little ground to spare in the country, every inch seems to be of so much consequence that none can be wasted in paths. But I think a path, instead of being a waste, is a great advantage, for the sun gets a chance to warm the ground, and makes the vegetables much sweeter and earlier.

Now, a vegetable garden can be made as interesting and as beautiful as a flower garden, and I must say that I enjoy mine as much as I do my flowers. I have it laid out with straight paths, the main

paths being five feet wide, and are bordered with Salsify and Parsnips; the narrower paths between the beds are eighteen inches wide, and can be bordered with Fern-leaved Parsley; it makes a beautiful edging, and grows handsomer as the season advances.

Everything should be planted in straight rows; mine run east and west, as that offers less resistance to the west wind, and every thing looks much neater, the wind not having a chance to confuse things.

A garden the size of mine, eighty feet wide by one hundred and fifty feet long, furnishes much work, but "knowing how is half doing it," holds true. Never let the weeds get ahead. The scuffle hoe is the most important implement, and must be kept in constant use. If the weeds are cut down when they are just above the ground it is comparatively little work to have the garden look neat and clean, and a woman can accomplish much, as I can testify. I pursue the level

culture plan, hill nothing, and find it the easiest and the best way. I raise all kinds of vegetables, including Celery and Egg Plant.

My garden "rig" consists of a linen duster that covers my dress entirely, a stout pair of buckskin gloves that fit loosely, and to them I put cuffs of enameled cloth, or table oil-cloth, a pair of light rubber shoes, and lastly, but not the least, a wide-brimmed hat, that used to be called a "flat." I tie the sides down, and find it a cooler head covering

than anything I know of. Thus dressed, I spend several hours in the garden every morning, and I do so enjoy it, every day bringing its work, first the sowing and then the reaping, if we faint not.

And now we are in the reaping time, Beets, Beans, Squash, Egg Plant, Cabbage, Corn, Cucumbers, Tomatoes and Potatoes, all are here; how delicious, and how much prized when we have watched and tended them from the beginning.—E. W. L.

THE CYCLAMEN—PRIZE ESSAY.

What is the best method of treatment in the propagation and cultivation of the Cyclamen to secure fine blooming plants?

The genus *Cyclamen* is composed of some seven or eight species, and their several varieties. They are low plants, having very beautiful flowers and very prettily marked leaves. They are natives of Europe and Asia, some varieties being very abundant in Switzerland and Italy. Although some of the varieties are to be found in almost every greenhouse, yet the *Cyclamen* is too little known when we consider the ease with which it can be cultivated, and the length of time the flowers remain in perfection, the profusion of bloom, to say nothing of its great value for greenhouse and window garden decoration.

The plants are easily cultivated, doing best in a compost of two parts of well decayed sods, one of leaf-mold, or cow dung, and a little sharp sand. A sprinkling of soot thoroughly mixed with the soil will increase the size and brilliancy of the bloom. In potting, be sure to drain well, as good drainage is indispensable to success; if the pots are filled about one-third with drainage it is none too much. Use porous or soft-baked pots by all means, and let the size of the pot be determined by the size of the plant, remembering that, as a rule, *Cyclamens* do not require large pots. When first potted water thoroughly, afterwards more sparingly, until growth commences. When potted the plants can be placed in a cold-frame, in any sunny situation, from which the sashes can be removed on all favorable occasions, and water given as required. On the approach of cool weather they

should be brought inside and placed in a light, sunny position where they can be given a winter temperature of from 45° to 50°. During growth and flowering water should be given as often as necessary, and liquid manure water at least twice a week. After their flowering season water should be gradually withheld, but do not permit them to become absolutely dry. About the first of May they can be planted out in a nicely prepared border, one having a northerly or easterly exposure being preferred. Place the plants about six inches apart each way, and let the bulbs or corms be placed at least two inches under ground. Keep them clear and free from weeds, and about the first of September they can be taken up and potted, as above advised. No watering is required after they are planted out, but care is required to guard against mice, as they are very fond of the bulbs, and often destroy great numbers of them.

Propagation is readily effected by seeds, which should be sown about the first of February, in a pot or pan filled with a compost of light sandy soil. Sow thinly and cover very slightly, and place in a warm situation as close to the glass as possible. Keep moist until the young plants make their appearance, which will be in about three weeks, although it occasionally takes three months for some of the seed to vegetate, so do not be impatient if the young plants do not appear at once. As soon as the young plants are large enough to handle they should be transferred to thumb pots or else into seed-pans, placing them at least two inches apart; place these young plants in a situation similar to that in which the

seed-pans were placed, and water very carefully, as to dry or drown them is equally injurious, and as soon as they attain a larger size they should be transferred into three-inch pots. In about eight or ten weeks some of them will be large enough to be transferred into four inch pots, which is large enough to bloom them in, and treat the others similarly as soon as they are large enough. If carefully treated all of the species will be large enough to bloom in the fall, excepting *Cyclamen Persicum* and its varieties, which will begin to flower in January.

It will thus be seen that by sowing the seed early and keeping the plants growing during the summer, nice blooming plants are soon obtained. The best place for growing the young plants during the summer season is to take a cold-frame and place it on a bed of coal ashes in any partially shaded situation, and in this place the young plants. By the means of sashes the young plants can be protected from storms and rain, and they can be easily watered when necessary, and besides a part of the frame can be used for growing *Primulas*, *Cinerarias*, and *Calceolarias*, if not wanted for *Cyclamens*.

Of the several species, *C. Europæum*, pinkish-purple and *C. Europæum album*, pure white, bloom from October to January, while the Ivy-leaved, *C. hederifolium*, with its very large rosy-purple

flowers blooms from September to January. When well grown these are extremely pretty plants, and it is to be regretted that they are so rarely seen in cultivation at the present time. *C. Persicum*, and its varieties, stand at the head of the family, and are the ones most generally cultivated; a packet or two of any good strain will give all sorts of different shades of color, from pure white to the deepest red and spotted. Of late there has been much improvement in the size and form of the flowers, and these varieties are offered under the names of *C. Persicum grandiflorum* and *C. Persicum giganteum*. The bulbs of this species are so flat and so nearly alike on each side that amateur cultivators are often puzzled to know which is the top. If carefully examined the remnants or scars of old leaf-stems will be seen, indicating the upper part, and it should be remembered that the corms or bulbs of *Cyclamens* are quite worthless after their third season of blooming, so that it is advisable to raise a few plants from seed every year.

The red spider is the only insect that troubles the *Cyclamen*, and as a remedy I advise dipping the leaves of the plant in soapy water every day from the time the insects are noticed until they are all destroyed, indeed, it is advisable to dip the plants twice a week as a preventive rather than a remedy.—CHARLES E. PARNELL, *Queens, N. Y.*

THE CULTURE OF PELARGONIUMS.

Pelargoniums are great favorites, and among the most beautiful plants we have for house culture. I do not understand why they are not more generally cultivated. Nothing can surpass the richness of coloring, or the beauty of their veined, shaded and spotted flowers, ranging from pure white, in all shades, through pinks, scarlets, crimsons to deep maroon and black. To be more definite, I will say that I refer to what are often called Lady Washington Geraniums, or the varieties of *P. grandiflorum*, which is a native of the Cape of Good Hope. The plants are of comparatively easy culture; they need rich soil and but little pot room. My favorites are the liliputian varieties, originated by Hovey, called Cambridge Pet, Commodore Nutt and Dolly Dutton.

They grow only about a foot in height, of compact habit, with small leaves, and when in full bloom are a beautiful sight, covered as they are with large clusters of blossoms. The large or show varieties are very handsome, though they grow much taller, and not nearly as symmetrical in shape, but if the old plants are well trimmed, they are objects of great beauty when they come into flower. Beauty of Oxtou, called double, is pretty and rich, though not double by any means, but has a round, Mallow-like blossom, with an extra number of petals. Some blossoms have the regular number, while others have seven or eight, and I once had one with ten petals, though I did not call it nearly as pretty as those having the usual number. *Striata* is very fine.

I think the best time to take cuttings is in August or September, for by that time they have made strong growth, and the stalks have become well ripened or hardened, and will root more readily. I find also that cuttings root easier from plants which have been kept in pots through the summer than from those in the open ground, as the latter, being more succulent, are apt to "damp off." After blooming they do not require much water, only enough to sustain life. I start cuttings in August or first of September, in two and a half or three-inch pots, and as soon as the roots have extended around the sides of the pots I repot into four-inch pots, potting them low. It is best, when you find they have rooted in the small pots, to pinch out the center, or "top them," at the third or fourth joint. This induces side branches to form, and an occasional pinching is necessary to keep them in good form, but never do it later than November or December, if you wish them to bloom early. All *Pelargoniums* need but little water through the last two named months, but it should be increased in January, and more still given when they begin to show buds and to come into bloom.

When the old plants are cut back, I let them remain in the pots on the south side of the house, where the heat induces new shoots to start, and when they are about an inch long I repot the plants, shaking off all the old soil, frequently washing it off, putting them in the same sized pots, but placing them low, that is, leaving a space of an inch or more at the top of the pot.

In September, when there is danger of frost, I remove them to a cool room where they have the sunshine till two or three o'clock. A room opening from another where a fire is kept, or a chamber warmed by a register, communicating heat from the room below, is sufficiently warm for *Pelargoniums*, and in such a temperature I keep mine, and they always grow stout and bushy. I usually repot my old plants in November or December, and if a plant be of unusual size I give it a four and a half or five-inch pot, but for most of them a four-inch pot is plenty large enough. And now we find the advantage of "potting them low," as it is called. As there is a

space of an inch or more at the top of the soil, I turn out the ball of earth carefully, not to disturb the roots, and place sufficient earth above the piece of crock at the bottom of the same pot to raise it the desired height, and fill in the soil around it. In these pots they remain and bloom. I keep them in this cool room until buds are well formed, when they are taken to the sitting-room, and placed in the sunny bay window to be forced into bloom. I give them liquid manure once a week while blooming, but never on any account should it be given until the buds are well set, as it will cause the plant to make growth instead of blooming freely.

The liliputian varieties usually bloom earlier than the large-flowered sorts, though Dolly Dutton is not as early as the others. Cambridge Pet and Commodore Nutt frequently bloom in January.

The monthly sorts, so called, Freddie Heint and Fred Dorner, I find to be quite free, though not as free as some might expect from the name. They bloomed quite freely last winter, also occasionally through the summer, and now at this writing, November 30th, are again in bud. These, with the liliputians, will flower early, then by February others will be in flower, and by March my bay windows will be all aglow with them, and their lovely blossoms are so attractive, mingled with the flowering bulbs, bright *Geraniums* and gay foliage plants, with drooping vines here and there.

I have not seen on aphid on my *Pelargoniums* for years, as I always give two good smokings in the fall. My method is to smoke them thoroughly, then in two days afterward smoke them again. Frequent washing of the leaves keeps them healthy, but when in bloom sprinkling must be done very carefully, as it spoils the flowers to drench them. I find the cause of failure with most persons, in the culture of *Pelargoniums*, is in giving too large pots, which causes them to attain great size at the expense of flowers.

Each year I am more and more delighted with this class of plants, and their beautiful Pansy-like flowers present an array of such exquisite coloring and shading as to be almost unsurpassed; and during the late winter and early spring months they are the chief attraction in my bay window, eliciting praises from all who see them.—MAY MACKENZIE.

FOREIGN NOTES.

MIXED FLOWER BEDS.

There are some arrangements of plants in a garden from which one never ceases to derive pleasure, whilst there are others which the eye soon gets tired looking on, however effective they may be as seen from some particular standpoint. Pretty nearly all that is possible both for and against the ordinary styles of modern bedding has been said; yet, where only a slight departure is made from beds confined to solid masses of some particular plant of one color edged may be with something that gives relief in form and hue, or the wearisome lines of ribbon border that used to be so much in favor, one sees how much has been sacrificed to obtain the one object which the bedding style affords, that is, a uniform sheet of bloom with nothing as it were to mar the display of color. Some of the beds in Hyde Park adjoining Park Lane that have this year been filled with a mixture of plants differing in habit and in color go to illustrate the facts here stated, so much better in effect are they than where the filling consists of the ordinary common place materials. A few of the beds alluded to have been planted as under: the common white Lily in single plants springing out of an undergrowth composed of pale pink Canterbury Bells and purple Pansies; another with *Verbena venosa* and *Abutilon Thompsoni* standing alternately in a groundwork of silver edged *Pelargonium Queen of Queens*. Carnations of various colors along with *Grevillea robusta* associate well together standing in a yellow setting of Harrison's Musk. In another bed *Ficus elastica* plant for plant with the narrow-leaved *Dracæna congesta*, each about two and a half feet high, has a groundwork of the yellow-leaved *Abutilon vexillarium*. Other beds there are in which scarlet-flowered tuberous *Begonias* rest on an undergrowth of green *Sedum* and in this way look well. Golden-leaved *Fuchsias* in other places are mixed with blue *Violas*. These are some of the mixtures that go to relieve the ordinary filling of the rest of the long series of beds here,

with a few that are arranged in the carpet style. The mixed beds just named have each a border composed of two or three rows of some low-growing distinct colored plants.—T. BAINES, in *The Garden*.

CLEMATIS JACKMANNI.

One of the most striking effects we ever remember seeing produced by this lovely climber and its varieties may now be seen in Mr. LEE's nursery, near the Isleworth Railway Station. On each side of the walks which run the length and breadth of the nursery are upright pillars placed a few yards apart, connected at top by drooping chains. These pillars and chains are just now one dense mass of flowers, deep purple, pale mauve, and reddish purple, with every intermediate gradation of shade. The effect of the whole is charming, every plant being just in perfection, having been planted some three or four years. The majority of the specimens are of the ordinary form of *Jackmanni*, but much finer in color is one called *superba*, the flowers of which are several shades deeper and richer than those of the type. One of the loveliest pale sorts is *Lady Caroline Nevill*, which has larger flowers than usual, broader petals, and of a delicate mauve. Among the reddish purples one called *Madame Desgrange* we consider the finest. It is a most profuse bloomer, and the color is superb. This is the finest sight in the way of *Clematises* about London, and any one in the neighborhood should see it during the next week or two.—*The Garden*.

PEGGED-DOWN DAHLIAS.

At Chiswick, Mr. BARRON has adopted the plan of pegging down Dahlias, both double and single, and in so doing has fully covered the ground, although the growth so far does not rise above ten inches from the soil. Of course, the height will soon increase now, but it is certain that the plants will not attain to more than from eighteen to twenty inches; such a mass should produce a

fine bed and a grand show of bloom presently. Mr. WILDSMITH pegged down Dahlias at Heckfield with capital results, and no doubt many others are doing the same. For the production of bedding displays dwarf plants are indispensable, but I have a decided preference for plants some three feet in height when I wish to admire the individual blooms, and that is one of the charms found in the Dahlia that single blooms of almost any kind command admiration.—A. D., in *The Garden*.

GRAFTING EPIPHYLLUMS.

German gardeners are employing *Cereus MacDonaldiae* as a stock for grafting *Epiphyllum* on, instead of *Pereskia*, as formerly. The latter is of too slender a growth for large specimen plants, though it serves well enough when the plants are small. It is also claimed that the plants flower much more freely on the common *Cereus* stock. "By the method recommended the *Cereus* is cut up into pieces of any desired length; they are immediately worked, and the cuttings being inserted in the usual way, they make roots whilst the grafts are taking, which is quite a novel process in the art of propagating."

ARRANGING CUT FLOWERS.

Perhaps the prettiest way for the greater number of flowers is to group them in a rather tall, narrow vase. In a moderate sized group one kind of flower should be prominent and everything else subordinate. Three blooms of white Spanish Iris cut with long stems for the principal feature, with a spray of Mock Orange or wild white Rose, a few Buttercups, a spray of Ragged Robin, and a few Grasses make a perfect group. A plant's own foliage always looks well with its flowers,

and where that is unmanageable, as in many Irises, something of the same kind may be chosen, such as that of the larger Day Lilies with purple Iris, or Reeds or strong Grasses with white or yellow ones. It often gives a good effect to carry out the color of the principal flower chosen with smaller flowers of a different character. Roses are unmanageable flowers to group cut as they usually are. To make them look well they should be cut with about eighteen inches of stem below the blooms and all the foliage preserved; then nothing looks better. A bold pale Rose like *La France* or a moderate-sized striped one like *Village Maid* with a few Pinks cut with long stalks, and a bloom or two of *Eschscholtzia* and grasses, make a grand group.—J. D., in *The Garden*.

NEW RACE OF PINKS.

A French nurseryman, M. REGNIER sends out a new variety of Pink which originated with him under the name of *Alexandre Regnier*. "This Pink," he says, "forms the commencement of an entirely new and interesting race, the plant being robust and very hardy. The flowers are numerous produced, are borne on sturdy, upright stems, and never burst." The flowers are sulphur yellow, and the season of blooming is so long the variety is called a perpetual bloomer.

WOOD FOR WOOD ENGRAVING.

The wood of *Phillyrea*, according to P. T., in *The Garden*, is perhaps next to Box the best for wood engraving. It has been used for this purpose with entire success, with the advantage that blocks of large size can be had of it without joining. It works quite as well as Box, and for hardness and durability in printing, seems to be but little inferior.



PLEASANT GOSSIP.

GOLDEN-ROD.

By the river, where the Willows, green and golden,
idly sway
In the glory of the sunshine, to the brooklet's
rhythmic play,
Where the Sumacs blaze in splendor, and the purple
Asters nod,
Blooms the symbol of September, airy, fairy, Golden-
rod.

Not more bright do June's rich Roses in their bril-
liant tints seem ;
Not more graceful are the Lilies which all through
the summer dream ;
Not more cheery or contented dance the Daisies on
the sod,
Than in dreamy, mild September, gleams our own
dear Golden-rod.

Purple mistings, filmy vapors, and soft amethystine
haze,
In this sweet September weather, draw a light veil
o'er the days ;
Yet there glows as though untrammelled fall the rays
of the sun-god,
In its own rare grace and beauty, gleaming, grateful
Golden-rod.

What the Crocus is to spring-time, and the Roses
are to June,
What the shifting sands of summer are to England's
changing dune,
What old landmarks are to pathways, that we have
from childhood trod,
So, unto the sweet September, is her glowing Golden-
rod.

—DART FAIRTHORNE.

STORING PLANTS—PERENNIALS.

Please inform me if the *Tritoma* should be taken
up to be kept over the winter, with earth about the
roots, and kept in earth, or if it can be kept dry, like
Dahlia roots?

Also, should the Pomegranate be kept in earth?

What is the reason that seeds of perennials fail to
germinate? I planted *Aquilegia cœrulea*, *Delphinium*
nudicaule, *Cedronella* and *Adonis vernalis*, and
tried my best with them, but did not get a plant.—
W. S. B., *Sypher's Cove, N. B.*

The roots of *Tritoma* can be wintered
in the cellar, buried in rather dry sand.

The Pomegranate should have its roots
covered with moist sand or soil.

The seeds of many kinds of herbaceous
perennials are far more difficult to germinate
than those of annuals. They need
to be kept in a moist soil, and if sown in
the garden in the spring, without shade
or protection, where they will be liable
to become dry when the ground is heated
by the sun, they will frequently fail alto-
gether. After sowing the seed, which

should be done as early as possible in
spring, the ground should be lightly
shaded in such a way as might be affected
by a covering of cotton sheeting, or by a
light covering of evergreen boughs. In
this way the ground can be kept continu-
ously and moderately moist, and after
some weeks the young plants will appear.

STANDARD ROSES—PLANTS.

1. Are the Standard or Tree Roses as easily raised
as the Hybrid Perpetuals, and if so, why are they not
more generally grown?

2. Will the Cypress Vine grow well on a trellis in
the house?

3. What soil and treatment does *Mahernia odorata*
require?

4. Will the Snapdragon do well as a house plant?

5. Which would I be most likely to succeed with in
a west window, *Maurandya* or *Cobœa scandens*?—
W. C. B., *Jericho, N. Y.*

1. Roses on tall stems, or Standard
Roses, as they are called, cannot be suc-
cessfully raised in the northern part of
the country, because they cannot be pro-
tected during winter. They are either
speedily frozen out, or, if that fate does
not attend them the first season, they are
injured and become diseased and are but
short lived. In milder climates there is
no difficulty with them, but here they are
practically worthless.

2. The Cypress Vine, *Ipomœa Quamo-*
clit, may be raised and bloomed in the
house, with proper treatment.

3. *Mahernia odorata* will thrive potted
in light soil, and receiving the ordinary
attention of window plants.

4. The Snapdragon may be raised in
the house, if desired.

5. *Maurandya* or *Cobœa scandens* may
be reared in a west window.

PHASEOLUS CARACALLA.

The flower figured on page 278, is *Pha-*
seolus Caracalla. I saw a beautiful vine
of it in Los Angeles; have also seen it at
W. C. WILSON's, Astoria, Long Island.—
S. P. W.,—*Long Beach, Cal.*

MOVING A CLEMATIS.

Can I transfer a *Clematis Jackmani* from one part
of the yard to another without injury?—R. A. C.

The plant can be moved this month.

THE GRASS PINK.

This odd, compound name is still more oddly applied to a native plant that grows from eight to twelve inches in height, and having no relationship to a Pink—that is, in fact, an Orchid. *Calopogon pulchellus* is its scientific name. This plant is a native of wet meadows and bogs of the Northern and Eastern States of this country, in which localities it often grows in great abundance, making the surface bright with its blossoms in June and July. A flower, nearly full size, is shown in the smaller engraving.

One of the most remarkable peculiarities of the flowers of the Orchid family is that of the inversion of the flowers of most genera by the twisting of the ovarium, or the pedicel, thus making the uppermost petal of the flower the lower one, in fact. The change of position in the flowers of this order of plants is supposed, by naturalists who have given much

is effected, as the pollenization of Orchidaceous plants is wholly due to insect agency. It is, therefore, interesting to have a flower of this family in which its parts appear in their proper or normal position—in the manner in which nature first formed it, if we may be allowed the expression.

The author of *The Orchids of New England* says of this flower that "nature has combined the white and yellow of the bearded lip and the purple pink of the other parts with her usual boldness."

The plants can be taken up with moss about the roots, after the flower buds have formed, and be placed in a dish supplied with water, where they will flower freely; they can also be cultivated in moist spots in the garden.



CALOPOGON PULCHELLUS
—THREE-QUARTERS NATURAL SIZE.



CALOPOGON PULCHELLUS.

POMOLOGICAL.

The American Pomological Society convened at Grand Rapids, Mich., on the 9th of last month. In the absence of its President, MARSHALL P. WILDER, of Boston, caused by feeble health, P. BARRY, of this city, was called upon to preside. An address of welcome was made by T. T. LYON, President of the Michigan Horticultural Society, to which a response in behalf of the American Pomological Society was made by Mr. BARRY. The Mayor of Grand Rapids, on behalf of the city, and President ANGELL, of Michigan University, on its behalf, also spoke words of welcome, to each of which the acting President responded.

The following named persons, as officers, were elected for the ensuing two years: President, MARSHALL P. WILDER, Boston, Mass.; First Vice President, P. BARRY, Rochester, N. Y.; a Vice President from each State and Territory; Treasurer, BENJAMIN D. SMITH, Boston, Mass.; Secretary, CHARLES W. GARFIELD, Grand Rapids, Mich.

study and investigation to them, to enable them to be more attractive to certain insects by whose visits fertilization

The retiring Secretary, Prof. W. J. BEAL, was offered a resolution of thanks for the efficient service he had rendered during his incumbency.

The Treasurer's report showed a thousand dollars to the credit of the society.

The address of President WILDER was read by Secretary BEAL. This consisted of a review of the organization of the society, and a rehearsal of some of the results effected by it. He urged the members to prosecute the rearing of new and better varieties of fruit. In conclusion, he said: "Let me again congratulate you on what our society has already accomplished. 'The past is secure,' but the great duty still remains of extending, fostering and rightly directing the pomology of our country. Let me urge you to persevere in this work and preserve our bond of union throughout the land. 'Union is strength,' and in nothing is this better illustrated than in the associated efforts which have given such influence and importance to our society. Perpetuate it, that the blessings which it confers may go down to posterity, and grateful millions shall bless the memory of those who laid its foundations, and shall aid in carrying out its benevolent designs. Think once more, my friends, of the great blessings which you may confer on mankind by the multiplication of good fruits. Next to saving the soul is the saving of health, and I know of no better means than an abundant supply of ripe fruits. Fruits are the overflow of nature's bounty; gems from the skies which are dropped down to beautify the earth, charm the sight, gratify the taste and minister to the enjoyment of life, and the more we realize this, the more shall we appreciate the Divine goodness to us, and the duty of providing them for others."

Discussions relating to the peculiarities of new or little known fruits, the reading of reports and papers, and addresses fully occupied all the time of the session, but a further notice of which cannot now be given.

THE JESSICA GRAPE.

This new variety of white Grape, sent out a few years since by D. W. BEADLE, of St. Catharines, Ontario, we found ripe on the 22d of August, at Vine Valley, on Canandaigua Lake, ten days earlier than Champion, in the same locality, was fit to gather. At that time it was quite ripe,

and had been so, apparently, for several days, as the birds had discovered its condition, and eaten quite a number of the berries. The fruit is of medium size in bunch and berry, has a pleasant, but not a high, flavor, somewhat acid, without foxiness, and no hard pulp, but juicy. Altogether, it is a fair Grape, and the earliest we know. It is a strong grower, with thick, healthy foliage.

VARIOUS INQUIRIES.

Mrs. K., of Tacoma, Washington Territory, has great trouble with her Fuchsias and Abutilons dropping their buds just before they should open. They grow nicely and look well, but very few of them come to bloom. Geraniums, also, drop their older leaves. The conservatory is open all day and closed at night, so that it stands at 70° to 80°, Fahrenheit, all the time. The plants are all thoroughly syringed once or twice a week, and watered every day. She would like to know if there is danger of giving too much and too strong manure water to blooming plants. The indications in this case are that the plants receive too much water. They should not, necessarily, be watered just so much each day, but each plant should be examined and be supplied with water if the soil is becoming dry. It is better to let the plants lack a little for water than to give them too much.

W. A. H., of Brooklyn, N. Y., wishes to know why his Pæonies and Narcissus plants do not bloom. They have been three years in the garden without blooming. He has the same experience with the Day Lily. If these plants are healthy, making a vigorous growth each year, and are in the full sunshine, they will bloom. If they are heavily shaded by buildings, or by other plants, they may remain for years without blooming; though the Day Lily is one of the best of plants in partial shade.

A PEA-BLOSSOM CLIMBER.

H. C., of Fulton Wells, Cal., asked, last month, about a climber with flowers of Pea blossom shape. I have two of these plants now in bloom, and they are very beautiful. I raised mine from cuttings; should they have beans, I will supply H. C., if I have the proper address.—MRS. G. T. STAMM, *Pasadena, Cal.*

HOW IT IS DONE.

In order to utilize in the garden the waste from the house at the least expense, first purchase a barrel of unslacked lime, then take an empty barrel and begin by putting in it a layer of soil or ashes, and then the waste from the house, everything that cat or dog will not eat. Keep this decaying vegetable matter covered with an inch of soil or ashes, using coal or wood ashes. Once a week in winter, and oftener in summer, cover with lime, say half an inch. The lime will be slacking, of course, and should be kept dry, but as lime retains its virtue a great while, the one barrel will last a year or more, according to the waste kept.

If starting this experiment in the autumn, early in the spring empty the contents of the barrel into the garden beds, cover with coal ashes, if the soil is not already deep enough, and spade it in. Should the soil be deep and good, the compost can be used without the ashes, then, when the weather is right, put it on the plants.

This experiment has been tried with successful results, the plants making vigorous growth and blooming freely. No other manure has been used for two seasons, except on perennial plants and on the bulb bed; on the latter, stable manure is used in the autumn to protect the bulbs as well as for nourishment.

Many persons make no use of coal ashes, but it certainly is an excellent mulch, "particularly for evergreens," so says an old gardener, and gardens where the soil baked badly have been brought into excellent condition by spading in coal ashes after other things had been tried without success. Fertilizing qualities are not claimed for coal ashes, but it gives depth to the soil in a very inexpensive way. It makes it work easier, serves as a mulch, and insects are not fond of working in it.

The care of waste matter should have attention, otherwise it would be dangerous to health as well as disagreeable. An abandoned hen house has been the place used in my case, and occasionally water from the hose pipe has been turned on to the barrels to help settle the material and hasten its decay, being always careful to use lime freely afterwards. A family of seven use only four or five bar-

rels during a season, as the waste is constantly settling, so it is not as formidable as it would at first appear.

It should be mentioned that the barrels be emptied in the autumn and spring also, but the waste can be used without turning and waiting for it to decay entirely, as many suppose it necessary.

Bones are also put into a barrel with alternate layers of wood ashes, and kept moist, usually with urine, which hastens the decomposition, and if properly cared for there is no offensive odor until they are disturbed.—E. V.

FLORAL GOSSIP.

A great many amateur flower-growers get an impression that a plant must have a large pot to grow in, if its cultivation is to be successful. I frequently see wee bits of Geraniums and Fuchsias planted in six and eight-inch pots. They do not do well, the owners tell me. I tell them the pot is too large, use a smaller one. Let the plant remain in it until you are sure by examining the ball of earth in which the Geranium, or Fuchsia, or whatever it is, grows, that the roots have completely filled the soil. Then put in a pot one or two sizes larger. Shift only as becomes necessary. After the plant has been given an eight-inch pot it is not likely to need a larger one for some time. When you have reason to think that the soil has been exhausted, remove as much from the top of the pot as you can without seriously disturbing the roots, and put fresh soil in its place. It is easier to do this than to repot the plant. Two and three year old Geraniums bloom much more profusely in six and eight-inch pots than they will in larger ones. So long as the new growth of a plant appears healthy there is no real need of putting it in a larger pot. This observation, you will understand, applies to old and mature plants, and not to young and rapidly growing ones. To decide about their needs you must be governed by an examination of their roots. Fuchsias require more root room than most other plants in ordinary cultivation. While you are growing them into good specimen plants they require frequent shifts, and it will not do to let them become root-bound.

"I know I ought to cut off this branch," we often hear a grower of flowers say,

"but it seems such a pity to do so." And in nine cases out of ten pity prevails, and the result is an awkward, one-sided plant, which no amount of tying or staking can make symmetrical or pleasing. When you are growing a young plant, always look ahead and think what you want it to be, and employ such means as you know will have a tendency to produce the desired result. If you want it to be compact, and it does not seem inclined to grow compactly, pinch off the ends of the branches, and force others to start. Keep doing this until you have as many started as you want. Then, if one branch is inclined to out-grow the others, cut it back. Keep the plant "well balanced" by promptly checking all one-sided growth. One very often sees tall, straggling specimens of the Abutilon. There will be no branches up and down the stalk, and only two or three way up at the top of the window. If you allow this plant to grow to suit itself, it will be pretty sure to grow in this way; but if you begin right and nip off the top of the young plant when it has reached the height where you want a bushy top to begin, and then nip out the ends of the branches which will start after the top has been cut off, and keep on doing this on their branches until you have as many as you want, it is an easy matter to make it grow in compact shape, with a well shaped, bushy top, which will produce a profusion of bloom. You see, you get plenty of blossoming surface in a small space. You condense it, so to speak. Usually, Geraniums are sprawly, ill-shaped plants. This is the fault of the grower, for, with proper attention, it is an easy matter to make them grow symmetrically. All that is required is patience, perseverance and pinching. Most amateurs defer the pinching until the plant has blossomed, they "want to see what it is like," but the proper time to begin training a plant is when it is small. Wait for blossoms until you have got it into a satisfactory shape.

One of the good old plants that ought to be grown more than it is, is the Laurestinus. I seldom see it in even large collections. It has pleasing foliage, and its large clusters of white flowers, produced freely in spring, are very beautiful. It is a plant that will stand a great deal

of neglect and abuse. It is pretty when small, and when it becomes a good-sized plant it is as fine as any thing I know of among shrubby greenhouse plants.—EBEN E. REXFORD.

GLAD AUTUMN DAYS.

The magic voice of spring has gone,
Her emerald blades are turning brown;
The Dandelion's ball of lace
Has given place to Thistle-down;
The Violets have caught the dew,
And hid it 'neath their bonnets blue,
And orchard blossoms, pure and sweet,
Have long since withered in the heat.

The sickle, sharp and keen, has reaped
The meadow blossoms, rows on rows;
The Barley lies in winnowed heaps,
And aftermath luxuriant grows;
The Sumac tall, all touched with change,
Forms crimson head around the grange,
And, floating now my path across,
On gauzy wings is Milkweed's floss.

O, Maples all in scarlet dressed;
O, spikes of fiery Golden-rod;
O, purple Asters everywhere
Upspringing from the sere-grown sod;
O, blue-fringed Gentian, growing tall,
Thou comest when the leaflets fall,
Sweet flowers to bloom 'neath golden haze,
And glorify glad autumn days.

—MRS. M. J. S.

MOORE'S DIAMOND GRAPE.

As the above Grape was noticed in your MAGAZINE, last season, and we have one year's more experience, I will say a little more about it. Bunch large, berry above medium or large. A most beautiful golden yellow, and of the best quality. Vine perfectly hardy and healthy. It rots, like nearly all other Grapes, but I don't care for that, as it is worth sacking if every sack cost two cents, instead of only one-quarter of a cent. It is about as early as any Grape in my collection of sixty varieties. I look upon it as one of the coming Grapes.—SAMUEL MILLER, *Bluffton, Mo.*

HARDY LILIES.

C. E. K., of Little Rock, Arkansas, asks about Lilies suited to the open garden, and as I have had large experience with all the various species of the Lily family, I answer, that *L. Thunbergianum*, in its many varieties, from chocolate to lemon in color, will be found the hardiest and surest to bloom of all Lilies, and they are very beautiful, too. They are as hardy and as sure to bloom as Tulips.—G. B. W., *Luzerne, N. Y.*

PERFECTLY HARDY.

Many a wasted dollar and many a great disappointment have these two words cost the writer, and his experience is, doubtless, that of hundreds more in all parts of the country. To fix upon some standard by which the comparative hardiness of plants may be accurately defined is as yet an unsolved task in horticulture, though such a standard would prove of great value. The conditions which enable a plant to withstand winter weather are so varied that latitude alone will not suffice to prescribe the limits wherein it may be safely entrusted to the inclemencies of our cold seasons. Trees, for instance, which withstand the severest winter weather on the eastern shores of Lake Michigan, succumb to the mildest on the western shores, and sheltered spots will enable plants to survive and flourish where, in the immediate vicinity, in unsheltered places, they would certainly perish.

Difficult as these facts make it to fix upon any definite standard, there exists no reason, known to the writer, why some approach toward it should not be made. We have well known trees, shrubs and plants whose general hardiness, or degree of tenderness, within certain limits, has been well established through many years of experience, and our horticultural conventions could designate some of the best known of these as standards, whereby to compare less known ones. When I am informed that some newly introduced shrub, or one unknown to me, is as hardy as the Lilac, I know that it can be safely planted where it may be exposed to a winter temperature of 35°: while if it be compared to an Althea, I am made conscious of the fact that its hardiness is about that of the Peach tree. But, until some such, or some better plan is devised, we must all learn through actual experience, and frequently pay dearly for the lessons, unless we can gain some advantage by the experience of others made public.

In this vicinity, Milwaukee, Wisconsin, among the introductions of the last few years, I have found the following to possess the qualities given them:

Prunus triloba, double-flowering Plum, perfectly hardy, and in many respects superior to the well known Flowering Almond. It forms a handsome small tree,

is a free bloomer, a perfect gem while in bloom, and highly ornamental as a low tree when not in bloom.

Hydrangea paniculata grandiflora, proves as hardy as the Lilac. Very ornamental as a single shrub upon the lawn, if well cut back each season.

Japan Maples, all the varieties that I have grown have proved nearly hardy. The ends of the branches have winter killed on some, but, as they look best grown as shrubs and the young growth is desirable, the cutting back required through winter killing is no drawback. The original type of the Japan Maple proves one of the most ornamental with me.

New Japan Weeping Cherry will not withstand our winters in this locality. The same holds true of the Double-flowering Cherry.

Clematis Jackmani, *C. lanuginosa candida* and *C. coccinea*, hardy, with slight covering of manure over the roots. *Clematis graveolens*, which I have seen somewhere quoted as not entirely hardy, proves perfectly hardy here in exposed situations, without any protection either to branches or root.

Among the new plants—new to me—which I have grown this year, there are two which I have found to be valuable acquisitions. The one is the *Dahlia Glare* of the Garden, and the other the bulb *Milla biflora*. These, of course, are not hardy, but are easily cared for during the winter season. Of the first, I have one planted out upon the lawn, which for nearly two months past has been continually covered with its brilliant flowers, never less than fifty and frequently over a hundred at a time. It has so little the appearance of a *Dahlia* that it has become almost a daily occurrence to have passers-by stop and inquire the name of the plant. The most vivid description of it was given the other day by one of a number of little girls passing by, who cried out, "Oh, look at that Christmas tree, in there, upon the grass." It is one of the *Cactus Dahlia* type.

Milla biflora has given, for a month past, an abundance of pure white, waxy, star-shaped flowers, an inch and a half in diameter and highly fragrant as the day closes. As a cut flower, for room decoration, it is particularly valuable, from the fact that it remains perfect for nearly

or quite a week after having been cut. My bulbs were started in small pots in a cold-frame, and afterwards transferred to the open ground, but I presume the same treatment as required for the *Gladiolus* would answer for it.—G., *Milwaukee, Wisconsin.*

COAL-OIL STOVES.

Among others, I have just read an article in your September MAGAZINE on "Heating Greenhouse with Oil Stove," and, as I have heard many complaints about the uselessness of oil stoves, few of which appear to be warranted; as far as I can judge of its merits, I beg leave, after an experience of several years, using an Adams & Westlake oil stove, not, however, for heating purposes alone, to give the many readers of your valuable MAGAZINE a few hints on the use, not the abuse, of the oil stove.

It may be admitted at the outset that this method of heating a conservatory would not be economical, but as a heating apparatus, on a small scale, the coal-oil stove can be made to work satisfactorily, I am quite convinced. Now, of the hundreds of stoves I have seen in use not one appears to have a fair trial, few of my acquaintances, if any, knowing just how they should be worked. We have tried, in the simplest way possible, to teach our domestics the use of the oil stove, and, not one, but all have signally failed to learn how to use it without making it smoke. Our stove has been in use continually, every summer for several years; wicks have only been supplied twice or thrice during that time, and the writer, E. P. W., Rockland, Mass., in your September number, may just as well learn it at the outset, that it is detrimental to the working of oil stoves to trim the wicks so often as he avers he did. As this trimming of wicks is, I find, a most important point in the use of these stoves, let me here say, that as soon as I arrived at the sentence where your correspondent says he trimmed the stove twice each day, I then easily accounted for the quantity of smoke he was able to produce. The only and proper way to trim a wick in one of these lamps is to use a clean cloth between the fingers, and, taking the wick between these, to gently press off the soft or burnt top of the wick, say three or four times a week,

if used every day. Scissors should not be used, and the top should not be cut off with any thing.

Using our stove so long, as I have already stated, so far only two, or at most three, ordinary wicks used yet, will show that what I say about the use of oil stoves is a further argument that few people have thoroughly learned how to use them, either for heating or cooking purposes. The Adams & Westlake is, I am convinced, the best I have seen yet. I can burn it all day in a parlor or bedroom, if you like, and not the sign of smoke or smell; but ours is washed as regular as our pots and pans, but the wicks are disturbed only as stated. Ours is a two-burner, with heater, cost, several years ago, \$12.00. And I would not do without this stove for one summer for double its cost. In winter we attach the heater, and it keeps our bath-room as comfortable as possible. Both in winter and summer it effects a great saving for us, and does for a small family of three nearly everything charmingly.—J. H. B., *Toronto.*

AMARANTHUS SUNRISE.

Perhaps the editor will recall the fact that, last spring, I complained of failure to raise plants of *Amaranthus Sunrise*, having tried in hot-bed, cold-frame, and also in a neighboring greenhouse, but without success. But "try again," a doctrine learned in youthful days, led me to invest another "quarter" in *Sunrise*. When, lo, and behold! well, about the first of May I filled an eight-inch pot with garden soil, and sowed my *Sunrise*, making a hole in the soil close to the rim of the flower pot, with my finger, then plunged the pot to the rim in the flower border. In about eight days my "Suns" arose. I shaded them from the mid-day heat with Spruce tree branches, and watered them from day to day only in the finger hole made in the soil of the flower pot, and they grew, and in a showery spell in July were transplanted to the border in twos and threes, because I could get better balls of earth than with single plants. And now, about September 1st, my "Sun" has reached the perfect plant as well as "the perfect day," and I am well paid. As you sought to comfort me when I said, "O, pshaw," I want you to share in my song, "Eureka." J. B. H., *Hatboro, Pa.*

FERNS—FASCINATION.

In forest nook,
By babbling brook
O'er tiny pebbles flowing,
And trees o'erhead,
On mossy bed
Their changeful shadows throwing,

I calmly lie,
'Neath azure sky,
With graceful Ferns around me,
And dreamy grow,
When, soft and low,
A music sweet surrounds me.

I list to hear
What voices clear
Such mystic tones are ringing;
Alone am I,
With no one nigh
Sweet carols to be singing.

But, to and fro,
Some high, some low,
The Ferns are gently swaying;
They sing to me,
In reckless glee,
Their countersign betraying.

On Ferns that toss
O'er beds of moss
I gaze in admiration,
Not wondering
At what they sing
So sweetly, "Fascination."

In fable lore,
'Tis told, of yore,
That Sirens oft enchanted,
With witching song,
Who sailed along
The island shores they haunted.

So, me, to-day,
You've lured away,
Fair woodland Sirens, hither,



And charmed my heart,
As with the art
That charmed the sailor thither.

Where'er they're found,
The world around,
In high or lowly station,
To all Fern fronds,
My heart responds,
"True, sing ye, 'Fascination.'"

—HANY.



OUR YOUNG PEOPLE.

STELLA RAY'S JOURNAL.

Starr's Grove.

September 1. Here we are, Harvey and I, safe and happy in Uncle George's sylvan retreat. We started from home very early this morning, and came three hundred miles by railway, reaching Lake Occident at four, P. M., where a friend of papa's met us and saw us safely on board the steamer.

Just in front of us, on the train, a darling three years old girl got the fingers of one hand caught by a falling window, which was so wedged that for a time no one could raise it. Harvey had been greatly entertained by her cunning chat, and now he jumped up and down and screamed until I hushed him. At last the sash gave way, and the poor flattened fingers were gently wrapped in a wet handkerchief, and the hand held up, to prevent the blood from rushing too freely to the bruised parts, causing throbbing, heat and pain.

September 2d. Just in the dim of last evening's twilight we neared this shore and were soon at the landing, and next in the arms of our friends. This cottage-eyrie is quite above the lake, and is reached by a stair-way and steep drive, which makes the place, to me, all the more fascinating. One gets tired of sameness, and may even grow weary of the conventional method of entering civilized abodes. Harvey is perfectly happy, and after a great fright he gave me on the boat, is going to give me no further anxiety. That was a lesson. While I was intensely enjoying the water and engrossed in thought, I became suddenly conscious of his absence. For half an hour he could not be found. I sent for the Captain, and he finally discovered him down in the engine-room with the stoker. "Just like a boy," said the Captain, as he made the announcement.

It seems to me, this evening, that I've been away from home a week; which reminds me of a sentence in "Little Pilgrim," which makes a spirit in heaven say, "We don't reckon time in the old

way here, but by *what happens*." Mamma thinks that when the authoress of that book once reaches the place she describes, she'll want to come back and re-write it.

September 4th. This evening, while at tea, Harvey buttered his second roll, saying, "I like your rolls, Auntie Starr, they are so light, and so white." Then, after a pause, "Do you know any flower, Auntie, that will make a heptagon?"

"Do I know any flower that will make a *what*?" Then Harvey tried to explain, and I let him help himself out as best he could. The general laugh that followed, Harvey thought, should be at Auntie's expense, "because it was so hard for her to understand." She said she was so flattered by his praise of her rolls that she could only think of the kind of flour that went into them. So much could be written of this locality and of the way we spend our time, that the little I can record seems worthless. We have already been out in the large boat coasting around, and found, among other things, in some shallows, a lot of Arrow head plants, *Sagittarius*, cropping out through an emerald sheet of Lemna, or "Duck-meat." It seemed like old times to come across these plants once more. I secured some of the Lemna to take home to let my pupils learn their curious methods of propagation for themselves.

September 5th. To-day, Auntie and I, with book and luncheon, climbed up to the vineyard with Uncle George. Harvey goes up every day. It is quite a distance above the cottage, and still above is a stretch of woodland heights. The vines are the Catawba and Delaware varieties. The vineyard is a lovely sight. I do hope nothing will destroy Uncle George's anticipations of its fruitfulness. I wish papa could see the beautiful tiers of staked vines on this forest hillside.

My only regret at being absent from home is that I am losing part of Will's vacation, and cannot see him again before he leaves.

September 6th. This is Sunday evening. To-day, we all went across the water two miles to church, at the post office village, where Uncle mailed and received letters for us. It all seemed very odd and interesting to me. I wish I could write all about it.

September 8th. Yesterday was cool and hazy, and so Uncle had us all rigged up with fishing tackle, and took us off in the boat to a shadowy cove, where fish do congregate, he said. This was Harvey's excursion, and a glorious day he had. We dined on the shore off of fish of his own catching, with some extras added, and he was prince of the feast.

September 10th. Each day, while Auntie has been napping in her room and Uncle in his hammock, I have sat in the tent and knit on Mehetable's shawl, and to-day I completed it and slipped it into my trunk without its having been seen. I do not care to make a mystery of it, neither do I choose to make explanations. Effie told me, one day, that mamma thinks it must be for her. It is large, and will be very warm. I am glad that I persevered.

Just before sundown we all, Auntie's maid included, went for a stroll, following first Uncle's and then Harvey's lead. There were Mushrooms to be gathered for breakfast, a fallen crow's nest with young ones to be examined, and a clump of "Ghost plant" to be admired. As we finally neared home, Harvey, on ahead, shouted out, "There's a light in the house." We hurried on, but saw no light nor any sign of disturbance.

September 12th. It is now eleven, P. M., and such an exciting evening as I have had. Most of the day I was wandering around in search of wild plants and flowers for my herbarium. Harvey was with me to carry my plant press, and when in-doors I took little note of what was going on. I only observed that there was no tea at the usual hour, because I was unusually hungry. I discovered that Uncle was missing, about dusk, but shortly after he came walking in with papa and Mr. Sheldon, and behind them came Will and Cyrus Roland. After the greetings, I found it had all been pre-arranged between Uncle and papa. Mr. Sheldon was invited because he had taken no vacation, and Cyrus was here because he was on his way to college

with Will, and all had conspired to give me a great surprise, and succeeded. Mr. Sheldon's presence was the only drawback to the pleasure of it all. Well, the dining-room door flew open after that, and such a supper as we did have.

Now that I have time to consider, I fear from signs I understand, that papa's hip is troubling him more than usual. I wonder how many worthy Confederates are suffering in the same way from Federal bullets.

September 13th. The gentlemen were to go to church to-day for the novelty of going by water, Mr. Sheldon stipulating to be known only as a layman, and so Auntie and I accompanied them. I had Will to myself going over, and he showed me a letter from Helen Holmes in answer to one from him. It was a very ladylike, dignified letter, and I said as much; but that was all I could say. I couldn't possibly joke him about her. On entering the church Uncle conducted us to pews, and, of course, Auntie and I entered first, and it happened that our dominie came next, and so I was between the two. We were early, and before services commenced a woman passed forward of us with a wrap of deep crimson and black stripes hanging loosely from her shoulders. I stared in blank amazement for a moment, and then, suddenly leaning forward and half rising, I exclaimed with smothered intensity, "O, there goes Mehetable's shawl!" Auntie on one side and Mr. Sheldon on the other laid each a hand on me in wonderment. My entire consciousness was instantly possessed of the absurdity of the situation, and I hastened to get outside, where I sank down upon a step. Auntie and Will followed, the others having the good sense to keep their seats. Auntie inquired if I were ill, and felt my forehead, while half laughing, half crying, I told Will to watch that woman, for I was going to have that shawl back. I had to say something. Then Auntie said, softly, "What makes you think that is your shawl, dear, or Mehetable's either?"

"Because I knit it, and I ought to know."

"But you had no such shawl here with you."

"I brought that very one with me to finish."

"But you haven't finished any shawl,

dear, and this is quite completed. Don't let's talk about it any more now,—."

"Auntie Starr, please don't think me an idiot, if I have just acted like one; every day when you were napping I was crocheting the border of that shawl, and last Thursday I finished it. Don't you remember Harvey saw a light in the house that evening, and that when he called out to us it was extinguished? Somebody must have stolen the shawl and sold it, or given it to that woman."

And so it proved to be. But, O, there was such a time about it that I am sick and tired of it all. Of course, I avoided Mr. Sheldon every moment. This is the second time I've sounded Mehetable's name in his ears when overwrought and excited. But he found an opportunity to inquire if that person with the singular name was the bane of my life. How I did want to snap him off! But I had to be respectful, and so merely answered: "O, no, she's poor and afflicted, and once saved—," then recalling mamma's share in the matter, I said, "You'll excuse me, Mr. Sheldon, from saying any thing more on the subject."

Brother Will leaves in the morning, and papa remains several days yet; and now I intend to get every bit of enjoyment out of the remaining time that is possible, and shall not open my journal again until I am at home, no matter what happens.

September 26th. We reached home last evening, and found our two lonely darlings quite well, and very glad to have us back. Papa is thoroughly rested and much stronger. Sambo has been

trying to run the office after his own flourishing method, but people understand him, and are only amused.

Papa has received a letter from Mr. Stone, he says:

"Indisposition having confined me at home for several days, I have made the acquaintance of my daughter, Carrie, through her report of her visit at your house, from her own standpoint. An inadvertent remark excited my interest, and I beguiled her into a full history. My devotion to business has only been equaled by her step-mother's devotion to society, and the child has been sadly neglected. Say to Mrs. Ray, that if any sum of money could secure to Carrie a home in your family for a year, it is at her command,—" etc.

To this, mamma only said, "Poor man."

September 30th. The Havens have confided to me that they have been notified by an English barrister that their distant relative, Lord Henry Haven, had died, leaving his monies and estate, valued at £50,000 sterling, to his seven heirs, of whom they are two.

"Dear me!" I cried, "that's \$250,000, and two-sevenths of that is—," and I went to figuring on the margin of a paper, "is, yes, its actually more than \$71,000."

"Yes, it *is*," sighed Mr. Haven, with a wo-be-gone face, "hisn't it hawful!" and his sister added, "W'en we 'ad hall we needed before, and were so contented; an' now this'll make hus such sights of worry."

What a situation! But shan't I enjoy it?

HELPING MAMMA.

"Do come here, Fred, and help me tie up this Rose bush," said Dora Martin to her ten-year-old brother.

"What is the use in trying to fix up things, papa isn't here to help us, and—and—."

Fred's voice trembled, and he turned aside his head to hide the tears that dimmed his honest hazel eyes.

"I know that papa isn't here, but he is in heaven, and perhaps knows all that we do and say," replied Dora, making a brave struggle to keep from sobbing aloud.

Dora approached her brother, and

placing her hand genly upon his arm, said:

"I have made up my mind to help mamma, and I want you to help me. This very morning I went into mamma's room and found her crying. She held a big yellow envelope in her hand, and I am quite sure that Mr. Davis, the groceryman, has sent in his bill again. I know that mamma hasn't the money to pay him, and that is the reason she was crying."

"What can we do?" asked Fred, in a despairing tone.

"I have a plan," replied Dora, "and if

you will help me, I am quite sure that it will succeed. Two years ago, papa subscribed for VICK'S MAGAZINE, and I have read every number so carefully that I know how to take care of all kinds of flowers and fruit. I followed the directions given in the MAGAZINE, and planted a bed of Cumberland Strawberries, and they are growing splendidly, and my Tea Roses are lovely. I have twenty different kinds of Roses, and a great many are in bloom, and besides I have Sweet Alys-sum, Chinese Primroses, Carnations, and a great many other varieties. Yesterday morning, a party of ladies and gentlemen that are visiting at Judge Maynard's stopped in front of our garden, and one of the ladies said that my flowers were 'perfectly lovely.' To-morrow night there will be a large party at Judge Maynard's. I am going to pluck my pretty flowers and form them into bouquets; do you think they will buy them, Fred?"

"Why, yes, I reckon they will; they ought to, any way. But what will mamma say?"

"Oh! you are not to tell mamma. I want to surprise her. Promise that you will not breathe a word about it," said Dora, earnestly.

"Of course, I wont. I say, Dora, you remember the two Cherry trees that papa gave me for my own?"

"Yes, I remember," replied Dora.

"Well, they are loaded with great big Ox Hearts. Last year one-half fell to the ground and spoiled. Bob Doyle gets fifteen cents a quart for Cherries, and they are not near so nice as mine."

"I believe you can sell them without the least trouble, Fred. Just think how surprised mamma will be!" exclaimed Dora.

Both children had become so enthusiastic that they could hardly wait until they had tested their ability to "help mamma."

Mrs. Martin sat by her bed-room window sewing. A troubled expression rested upon her pale, care-worn face. Occasionally she would pause to brush away a tear. She heard the voices of her children, and glancing out of the window saw them engaged in earnest conversation.

"Bless my dear ones," she sighed, "how free from care they are."

Raising her eyes heavenward, she

breathed a prayer to One who carefully watches over the widow and the fatherless.

"See, girls! what lovely flowers," exclaimed Mrs. Maynard, as she entered the drawing-room. In each hand she held a bunch of nicely arranged Roses, Portulacas, Geraniums and a variety of other flowers.

"What exquisite flowers!"

"How perfectly lovely!"

"I really must have one of those bouquets!"

"Where did you get them?"

"Girls, girls, I can't possibly answer every question. Follow me, and see what is in store for you," said Mrs. Maynard, in a laughing tone. She turned and left the room, followed by the merry troop of girls. When they reached the piazza, they saw a boy, a girl, a donkey, and a cart filled with the precious flowers.

"Where do you come from, child?" asked one of the young ladies, turning to Dora.

"I am Mrs. Martin's little girl. Mamma does not know that I am selling flowers, but she looks so pale and sad, and Fred and I thought if we could help mamma, perhaps she would not cry so often, and—and—."

The child's blue eyes filled with tears as she glanced timidly around. The ladies exchanged glances, and in an instant every hand held a purse.

"How many bouquets have you, dear?" inquired Mrs. Maynard, kindly.

"Just twenty," replied Dora.

"Now, young ladies, select your bouquets, and as the little girl is not willing to name a price, pay her whatever you think they are worth," said Mrs. Maynard.

The young lady who had spoken to Dora, selected one of the prettiest bunches, and placing a two dollar bill in Dora's hand, said:

"Take this, dear, I am so much obliged to you for bringing the lovely flowers."

There were fifteen young ladies, and after they had selected their flowers five bunches remained.

Mrs. Maynard, coming forward, said, "I will take all that are left," and reaching out her hand, she placed five dollars in the little palm extended toward her.

"You have something else in your cart, what is it?" inquired Mrs. Maynard.

"Only Fred's Cherries," replied Dora.

"They are perfect beauties," cried Mrs. Maynard. "How many quarts have you?"

"Ten," replied Fred, in a voice that they could hardly hear what he said.

"How delighted cook will be to have such fine fruit to preserve. How much do you want for them, my boy?"

"Bob Doyle says that his Cherries are worth fifteen cents a quart, but——"

"Here are two dollars, and if you have any more of the same kind, bring them to me and I will take them at the same price," said Mrs. Maynard, pleasantly.

"Hurrah! hurrah! who says that we can't help mamma?" exclaimed Fred, joyously, as Dora walked up to Mrs. Martin and placed a roll of bank notes in her hand.

"Why, children! what does this mean?" said Mrs. Martin, as she glanced at the money in her hand. She was thoroughly bewildered and quite at a loss to understand what it meant. Dora and Fred related what they had done, and in a trembling voice, as though she feared that her mamma would be displeased, Dora said:

"I got twenty-five dollars for my flowers, and Fred got two for his Cherries, that makes twenty-seven." Glancing up into her mamma's face, she said, "Are you glad that we can help you, mamma?"

Mrs. Martin drew the children toward her, and clasping them in her arms, said:

"You dear, precious darlings! you have, indeed, 'helped mamma.' I can now pay the bill that has caused me such anxiety, and have a portion of the money left, which will enable me to see a way to make us all comfortable."

The days pass by and the little family continue happy and prosperous. Mrs. Martin has followed the example of her children, and turned her attention to the cultivation of fruit and flowers. She has

the handsomest garden and orchard for miles around.

An old farmer in the neighborhood called on Mrs. Martin, and asked her to tell him the secret of her success. "My gal says that you git it out of a book that comes onct a month. Now, I aint no hand fer to encourage book larnin', an' I sez to Sary Ann, sez I, 'We aint got no money to spend on books an' papers,' but she sez if I give her the money to pay for gettin' the MAGAZINE that Mrs. Martin's folks take, she'll promise to earn enough money from raisin' fruit an' flowers to help pay off the mortgage."

"If I were you, Mr. Dawson, I would gratify Sary Ann" replied Mrs. Martin. "She is a bright, energetic girl, and is sure to be successful in anything she may undertake. She will find the MAGAZINE invaluable. Take my advice, Mr. Dawson, and gratify your daughter. I feel sure that you will not regret it."

"I reckon you're right, Mrs. Martin, an' if Sary Ann does as well as your little gal, why I calkerlate to take a paper or two. Good mornin', marm, and much obliged to you."

The farmer hurried homeward, not with the slow, shuffling gait that characterized his movements for so many years, but with an activity so marked that the neighbors were at a loss to understand the meaning of the change.

In time the "paper or two" found their way into the home of farmer Dawson, who never ceased to be thankful for the advice which Mrs. Martin had given him. Sary Ann fulfilled her promise. She contributed quite a large sum toward paying off the mortgage. Farmer Dawson was heard to say that "it does beat everything, the way children help their parents now-a-days."—MARY AUGUSTA THURSTON.

THE FLIGHT OF HUMMING-BIRDS.

The humming-birds are small, the largest species attaining to about the size of a swallow, the smallest not much larger than a humble-bee, and of delicate structure. They are famed for their magnificent plumage, which almost always displays metallic tints. Their flight does not resemble that of any of our native birds, being maintained by rapid vibrations of the wings, which enable them to

remain apparently motionless in one spot for a considerable time. Their passage from place to place is effected by a series of rapid darts, almost too swift for the eye to follow. Their flight might perhaps be best compared to that of a moth. Like these insects, the humming-birds hover for long over a flower, sipping the honey with their long, thin bill, and in other particulars also—in color and form,

for example—humming-birds and moths offer some remarkable parallels. Representatives of each may be found, to distinguish between which needs a close scrutiny, and which, when on the wing, might perplex the best observer. To all outward appearance the humming-birds are birds when at rest, insects when in motion.—W. J. BEHRENS, in *Popular Science Monthly*.

EDITOR'S MISCELLANY.

A BEAUTIFUL WORK OF ART.

VICK'S MAGAZINE for 1886 it is intended shall continue, as heretofore, the leading exponent and advocate of horticultural taste and art. Its attractive appearance it is expected will be increased. Every phase of gardening will receive attention, and yet it will be adapted to the wants of the people. Its information will pertain to the unpretentious yard with its bit of grass and a few flowers and shrubs, to the larger expanse of lawn, to the flower garden in its broadest features, to the window garden, the conservatory, and the greenhouse, to the vegetable and the fruit garden, to wild flowers, natural scenery, and all that relates to these subjects. The love of horticulture is increasing among our people, and carrying with it its refining influences and its quiet enjoyments. To aid in extending the interest in this beautiful and valuable art we desire that our MAGAZINE shall be found in thousands of homes where now it is unknown. In order to effect this result we ask the co-operation of every one of our readers. We wish each one of our present subscribers to become an agent, and send us some new names for the coming year. As a compensation for such service, we have now in preparation a most beautiful work of art. This work consists of

SIX LARGE PLATES,

representing some of the most rare and beautiful plants and flowers in the world, and which, in their natural state, few persons will ever be apt to see—these plates alone giving them an opportunity to form an idea of their exceeding grace and beauty. These plates on heavy, rich-toned paper—eleven and a half by fourteen and a half inches in size—will be of the finest workmanship in chromo-lithography that can be produced. The plates will be accompanied by appropriate letter-press descriptions, and all enclosed in a neat cover or case, making the work a handsome ornament for the library or parlor.

This beautiful Folio will be given to every person sending us a club of four names as subscribers to the MAGAZINE for 1886 at the regular subscription price of \$1.25 a year, or \$5.00 for the four names.

Every one of our present subscribers can consider himself or herself an agent, and, with a little effort, can introduce the Magazine to friends and neighbors, and unite them into Clubs for the coming year, sending his own name and that of three others, and thus secure the

FOLIO OF RARE AND BEAUTIFUL FLOWERS.

The price of the Folio alone, without subscription, will be two dollars, and this is low.

In order that every subscriber to the Magazine may be interested, and thus clubs be more easily secured, we have prepared one of the plates with reference to its use singly, or separately, from the Folio. This is an *exquisite plate of Roses and Pansies* artistically grouped, and it will be given to each subscriber to the Magazine for one year, at \$1.25. This plate, framed, will form one of the handsomest of wall pieces, and no lover of beautiful flowers can fail to admire it. It is time now to begin to canvass

for the new volume, which will begin with the January number, and we hope to enlist the efforts of every one of our present subscribers in such a manner that we can send each one the

FOLIO OF RARE AND BEAUTIFUL FLOWERS.

Please find a Subscription Order Sheet in this number, which can be detached and used to write the names of your club. Start with your own name and then see your friends. It is not now too early to begin, and the work in this field during the next two months will be worth more than all that can be done after the commencement of the new year. When you have completed a club of four, some other member may want the Folio and will give his assistance in doubling the number, making eight, and entitling to two full copies. Do not delay.

ECONOMIC ORNITHOLOGY.

The United States Department of Agriculture has a branch of Economic Ornithology, under the Division of Entomology, and Dr. C. HART MERRIAM has been appointed as Ornithological Agent, to take charge of this Divisional work.

The scope of the investigation will cover the entire field of the inter-relation of birds and agriculture, particularly from the entomological stand-point. The inquiry will relate primarily to the food-habits of birds, but will include also the collection of data bearing on the migration and geographical distribution of North American species. The co-operation of farmers is solicited, and those having knowledge of food-habits which are beneficial or detrimental to agricultural or horticultural interests are requested to communicate the same to Dr. MERRIAM.

The assistance of persons willing to aid in the collection of birds' stomachs is particularly desired.

Information is also wanted concerning the presence and habits of the so-called "English Sparrow," *Passer domesticus*, in the Southern States and in the region west of the Mississippi.

Dr. MERRIAM can be addressed at the Department of Agriculture, Washington, D. C., and will send circulars and printed forms in relation to the information desired.

THE LILY OF PURITY.

Under this name some variety of Lily is being advertised at one dollar a bulb. By the description given of it it is evidently either *L. longiflorum* or *L. Harrisii*, which can be had at any time for twenty-five or thirty cents. We do not suppose that our readers will be taken in by such an advertisement, but it is well enough to state the facts in the case, as is here done.

NEW HORTICULTURAL PUBLICATIONS.

The *American Florist* is a new semi-monthly trade journal, published in Chicago. It is intended as a medium for professional florists, and in this capacity it has a useful field of labor.

Popular Gardening, by ELIAS LONG, of Buffalo, is a sixteen-page monthly on garden subjects.